iReal Basic Scanning Environment Setting Requirements

1. The computer configuration needs to meet these requirements.

- Press Win + R and type dxdiag to check computer configuration.
  - Minimum computer configuration required: CPU: i7-10750H, 32G of RAM, NVIDIA GTX1660Ti, USB3.0, win10 64bit.
    - If the CPU configuration is not up to the standard,
      - software will run with lag.
      - AMD is not recommended.
    - If the GPU configuration is not up to the standard,
      - processing time is abnormally long.
      - it will show graphics version is low without the use of NVIDIA.
    - If the RAM configuration is not up to the standard,
      - the data may disappear partially or completely after the generation of point cloud and wrapping.
      - there is not enough memory to support large scanning data.
    - Incorrect use of USB port,
      - please change to USB 3.0 port or change a computer when encountering calibration struck, scanning struck and device disconnection.
    - Using other computer system such as 32-bit system,
      - the software can not run normally.

2. Laptops should be in good working conditions.

- If the laptop is not powered on,
  - the reduction of CPU requency will cause the data splicing jamming. It has a fast power consumption during the data process, which doesn't support long-time scanning.
- If laptop is not set to high-performance mode,
  - the automatic reduction of CPU requency will cause the data splicing jamming.
- If the laptop is over heated because of high working temperature or computer heating up slowly,
  - the reduction of CPU requency will cause the data splicing jamming. Point cloud / wrapping process will be slow.

3. Recommend to turn off the firewall.

- Turn off anti-virus softwares, system security protection and computer firewall before installing or running the scanning software.
  - The third-party protection softwares might cause the software deleted or missed in the installation progress.
  - It may cause the connection failure.

4. It equipped with correct graphics card driver version and settings.

- Visit NVIDIA official website to download the latest driver.
  - The software shows the graphics card driver version is too low to scan.
- The scanning software is not set to use high performance mode of GPU.
  - It will cause scanning and splicing jamming.

5. Use administrator to install the scanning software properly.

- Files are accidentally deleted by anti-virus softwares.
  - The software can not run due to the missing files.
- The disk space where the software is installed is less than 20G.
  - Data may disappear partially / completely in the process of point cloud generation and wrapping. The bigger the scanned data are, the larger the disk space is.
- The performance is poor after using the software for a period of time.
  - Consult sales every half a year to keep the latest scanning software.
- Abnormal display of software interface icons.
  - Set the screen resolution to 1920 * 1080 or change your computer if the setting is not supported.

6. Lossless data transmission cable.

- Device connection failure
- Calibration and scanning jamming
  - The wrong daily maintenance method of the data cable results in cable damage, it needs to replace the damaged cables caused by wrong daily maintenance method like folding it frequently and roughly.

7. Correct SET files.

- The software prompts the SET files are incorrect or expired.
  - The subfolder where the set file is located is not selected when importing. (The deepest level subfolder is correct.)
- The software prompts the SET files are incorrect.
  - Wrong naming of RGF file. (The right naming should be like SK01/U0C0001.RGF.)

8. Normal Calibration.

- Unable to scan, only small amount of points, unable to scan markers, and easy dislocation of splicing.
  - It can not be calibrated in sunlight or strong light environment, which will affect the calibration accuracy.
- Unable to scan, only small amount of points, unable to scan markers, and easy dislocation of splicing.
  - It should place calibration plate on the clean plane without markers and reflective surface.
- Unable to scan, only small amount of points, unable to scan markers, and easy dislocation of splicing.
  - No calibration after software installation, long-term use and transportation.
- The temperature of the outside environment is too low to cause the camera to start, and the scanner need to plug in for 10-15 minutes to calibrate again.
  - Software shows nothing when calibrating.

9. Don't open other scanning softwares in the progress of scanning.

- Scanviewer must be closed.
- The scanning software of other manufacturers must be closed
- Other softwares with high-memory consumption such as ZBrush, Maya, 3ds Max must be closed.

10. Precautions during scanning.

- Recommend computer to keep scanning after scanning several major projects continuously, otherwise it may be stuck to restart the software /
- If the external light is too strong, it may lead to a small amount of points. It is recommended to block the sunlight.